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09/879,448	06/12/2001	Robert A. Migliorini	2001B056	3553
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ExxonMobil Chemical Company			EXAMINER	
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			ART UNIT	PAPER NUMBER
			1712	
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Please find below and/or attached an Office communication concerning this application or proceeding.

		AS-X
,	Application No.	Applicant(s)
	09/879,448	MIGLIORINI ET AL.
Office Action Summary	Examiner	Art Unit
	Christopher M. Keehan	1712
The MAILING DATE of this communication Period for Reply	on appears on the cover sheet with	the correspondence address
A SHORTENED STATUTORY PERIOD FOR F	DEDI VIS SET TO EXPIRE 2 MOI	NTH(S) EDOM
THE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 of after SIX (6) MONTHS from the mailing date of this communicat. - If the period for reply specified above is less than thirty (30) days. - If NO period for reply is specified above, the maximum statutory. - Failure to reply within the set or extended period for reply will, by. - Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). Status	TON. CFR 1.136(a). In no event, however, may a replicion. s, a reply within the statutory minimum of thirty (continuous) period will apply and will expire SIX (6) MONTH y statute, cause the application to become ABAN	ly be timely filed 30) days will be considered timely. IS from the mailing date of this communication. NDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed o	n 30 July 2002 .	
	This action is non-final.	
3) Since this application is in condition for		ers, prosecution as to the merits is
closed in accordance with the practice under the closed in the cl		
4)☑ Claim(s) <u>1-68</u> is/are pending in the appli	cation.	
4a) Of the above claim(s) is/are wi	thdrawn from consideration.	
5) Claim(s) 34-51 is/are allowed.		
6) Claim(s) <u>1-33,52 and 53</u> is/are rejected.		
7) Claim(s) <u>54-59 and 62-68</u> is/are objected	d to.	
8) Claim(s) are subject to restriction	and/or election requirement.	
Application Papers		
9) The specification is objected to by the Exa		
10) The drawing(s) filed on is/are: a)	•	
Applicant may not request that any objection		, ,
11) The proposed drawing correction filed on		approved by the Examiner.
If approved, corrected drawings are required 12) The oath or declaration is objected to by t	, ,	
	He Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		440() ()
13) Acknowledgment is made of a claim for f	oreign priority under 35 U.S.C. §	119(a)-(d) or (t).
a) All b) Some * c) None of:		
1. Certified copies of the priority docu		- Hanking Nie
2. Certified copies of the priority docu		
 3. Copies of the certified copies of the application from the Internation * See the attached detailed Office action for 	nal Bureau (PCT Rule 17.2(a)).	_
14) Acknowledgment is made of a claim for do	omestic priority under 35 U.S.C. §	119(e) (to a provisional application).
a) The translation of the foreign languages 15) Acknowledgment is made of a claim for do	· , ,	
Attachment(s)	. ,	-
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-9-3) Information Disclosure Statement(s) (PTO-1449) Paper 1	48) 5) Notice of Info	mmary (PTO-413) Paper No(s) ormal Patent Application (PTO-152)
S Patent and Trademark Office PTO-326 (Rev. 04-01) Of	ffice Action Summary	Part of Paper No. 8



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DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

The objection to Claim 51 has been withdrawn due to Applicant's amendments.

Claim Rejections - 35 USC § 102

The rejection of Claims 1-4, 7-21, 23-25, 34-45, and 48-50 under 35 U.S.C. 102(e) as being anticipated by Peiffer et al. (6,086,982) has been withdrawn due to Applicant's amendments and in light of a new rejection.

The rejection of Claims 31-33 under 35 U.S.C. 102(e) as being anticipated by Peiffer et al. (6,086,982) has been maintained and is as set forth in the previous office action and further delineated below.

Claim Rejections - 35 USC § 103

The rejection of Claims 5, 6, 22, 26, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. (6,086,982) has been withdrawn due to Applicant's amendments and in light of a new rejection.

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The rejection of Claims 28, 46, and 47 under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. (6,086,982) in view of Bader et al. (5,972,496) has been withdrawn due to Applicant's amendments and in light of a new rejection.

The rejection of Claims 27 and 51 under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. (6,068,982) in view of Touhsaent (6,013,353) has been withdrawn due to Applicant's amendments and in light of a new rejection.

Declaration Under 37 C.F.R 1.132

The Declaration filed by Applicant on 7/30/02 has been considered, but it should be noted that it is still unsigned. The declaration explains how Peiffer et al. do not use a Ziegler-Natta catalyst and the claims have been examined accordingly. However, as Applicant has added independent claims that do not require a Ziegler-Natta catalyst, the declaration does not appear to be applicable to these claims.

New Claim Objections

Claim 31 is objected to because of the following informalities: the claim contains the word "silicon" and should probably read "silicone" to maintain uniformity.

Claims 54-59 and 62-68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. A reasonable search of the

prior art of record failed to reveal the limitations as set forth in the Claims above claims, specifically a polyolefin core, a first tie layer comprising a silicone additive and a material selected from the groups as claimed, a first skin layer exterior to the core layer and the first tie layer, and on the same side of the core as the first tie layer, with the first skin layer is selected from the group as instantly claimed, and a second skin layer exterior to the core and on the opposite side of the first tie layer, with the second skin layer selected from the groups as instantly claimed. The prior art of record does not appear to teach or disclose a silicone additive in an inner layer.

Allowable Subject Matter

Claims 34-51 are allowed. A reasonable search of the prior art failed to reveal the limitations as set forth in Claims 34, 38, and 42, specifically a polyolefin core comprising a Ziegler-Natta catalyst polymerized polymer, a first tie layer comprising a silicone additive and a material selected from the groups as claimed, a first skin layer exterior to the core layer and the first tie layer, and on the same side of the core as the first tie layer, with the first skin layer is selected from the group as instantly claimed, and a second skin layer exterior to the core and on the opposite side of the first tie layer, with the second skin layer selected from the groups as instantly claimed. The prior art of record does not appear to teach or disclose a silicone additive in a tie layer.

New Claim Rejections - 35 USC § 102

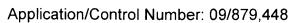


Claims 1-4, 10, 12-18, 20, 23-25, and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Bothe et al. (4,734,317). Bothe et al. disclose a thermoplastic film comprising a core layer comprising a Ziegler-Natta catalyst-polymerized polypropylene wherein the core layer comprises the interior of the film (Abstract and col.4, line 57-col.5, line 5), a first layer comprising a polyolefin and a silicone additive, wherein the first transition layer is exterior to the core layer, and a first skin layer comprising a polyolefin wherein the first skin layer is exterior to the first transition layer and the core layer (Abstract). As Claim 1 reads, the skin layer can be on one side of the core and the transition layer on the other side of the core.

Regarding Claim 2, Bothe et al. disclose wherein the first skin layer has an exposed surface exposed to corona treatment (col.6, line 61-col.7, line 2).

Regarding Claims 3 and 4, Bothe et al. disclose wherein the silicone additive is as instantly claimed (col.3, lines 46-56).

Regarding Claims 10, 12, 13, 14, 15 and 17, Bothe et al. disclose wherein the first skin layer comprises a polymer selected from the group as instantly claimed in the instantly claimed amounts (col.4, lines 6-30). Although Bothe et al. do not appear to specifically disclose the process by which they are formed, Applicant is reminded "even though product-by-process claims are limited by and defined by the process, determination of patentability is based in the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is



unpatentable even though the prior product was made by a different process." *In re Thorpe, 227 USPQ 964, 966.*

Regarding Claim 16, Bothe et al. disclose wherein the core layer comprises a polymer selected from the group as instantly claimed (col.3, line 57-col.4, line 5).

Regarding Claim 18, Bothe et al. disclose wherein the core layer comprises at least about 70% of the total thickness of the film (col.6, lines 59-60).

Regarding Claim 20, Bothe et al. disclose wherein the first transition layer has a thickness of about 0.2 to about 3 microns, which is included in the instantly claimed range (col.6, lines 50-60).

Regarding Claim 23, Bothe et al. disclose wherein the silicone additive has a viscosity as claimed (col.3, lines 46-56).

Regarding Claims 24 and 25, Bothe et al. disclose wherein the first transition layer comprises an amount of silicone additive as instantly claimed (col.3, lines 20-25).

Regarding Claims 31-33, Bothe et al. disclose a method of making a film comprising coextruding a film through a die wherein the film comprises a core layer comprising a polyolefin wherein the core layer comprises the interior of the film, a first transition layer comprising a polyolefin and a silicone additive, wherein the first transition layer is exterior to the core layer, and a first skin layer comprising a polyolefin, and being substantially free of a silicon additive, wherein the first skin layer is exterior to the first transition layer, and wherein the first skin layer is exterior to the core layer (Abstract and col.4, line 57-col.5, line 5), cooling/quenching the film, and surface treating one or more exposed surfaces of the film with corona treatment, and orienting



the film in the machine direction and the transverse direction (col.5, line 61-col.6, line 37).

Claims 1, 3-6, 10, 12-19, 24, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Shah et al. (6,291,063 B1). Shah et al. disclose a thermoplastic film comprising a core layer comprising a Ziegler-Natta catalyst-polymerized polypropylene wherein the core layer comprises the interior of the film (col.3, lines 48-65, col.6, lines 38-49, and col.11, lines 20-24), a first layer comprising a polyolefin and a silicone additive, wherein the first transition layer is exterior to the core layer, and a first skin layer comprising a polyolefin wherein the first skin layer is exterior to the first transition layer and the core layer (col.3, lines 48-65). As Claim 1 reads, the skin layer can be on one side of the core and the transition layer on the other side of the core.

Regarding Claims 3 and 4, Shah et al. disclose wherein the silicone additive is as instantly claimed (col.12, lines 21-29).

Regarding Claims 5 and 6, Shah et al. disclose wherein a sufficient amount of silicone additive is incorporated in the first layer to confer a coefficient of friction in the instantly claimed ranges (col.12, lines 53-57).

Regarding Claims 10, 12, 13, 14, 15 and 17, Shah et al. disclose wherein the first skin layer comprises a polymer selected from the group as instantly claimed in the instantly claimed amounts (col.10, line 64-col.11, line 40). Although Shah et al. do not appear to specifically disclose the process by which they are formed, Applicant is reminded "even though product-by-process claims are limited by and defined by the



process, determination of patentability is based in the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe, 227 USPQ 964, 966.*

Regarding Claim 16, Shah et al. disclose wherein the core layer comprises a polymer selected from the group as instantly claimed (col.9, lines 14-41).

Regarding Claim 18, Shah et al. disclose wherein the core layer comprises at least about 70% of the total thickness of the film (Examples).

Regarding Claim 19, Shah et al. disclose a film thickness included in the instantly claimed range (col.12, lines 58-64).

Regarding Claims 24 and 25, Shah et al. disclose wherein the silicone additive is present in the instantly claimed ranges (col.12, lines 21-29).

Claims 1-18, 20, 24, 25, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Bader et al. (5,972,496). Bader et al. disclose a thermoplastic film comprising a core layer comprising a Ziegler-Natta catalyst-polymerized polypropylene (col.3, lines 6-14) wherein the core layer comprises the interior of the film (Abstract), a first layer comprising a polyolefin and a silicone additive, wherein the first transition layer is exterior to the core layer, and a first skin layer comprising a polyolefin wherein the first skin layer is exterior to the first transition layer and the core layer (Abstract). As



Claim 1 reads, the skin layer can be on one side of the core and the transition layer on the other side of the core.

Regarding Claim 2, Bader et al. disclose wherein the first skin layer has an exposed surface exposed to corona treatment (col.6, lines 28-30).

Regarding Claims 3 and 4, Bader et al. disclose wherein the silicone additive is as instantly claimed (col.4, lines 4-27).

Regarding Claims 5 and 6, Bader et al. disclose wherein a sufficient amount of silicone additive is incorporated in the first layer to confer a coefficient of friction in the instantly claimed ranges (col.6, lines 45-50).

Regarding Claims 7-9, Bader et al. disclose wherein the layer comprises an antiblocking agent as instantly claimed (col.4, lines 28-54).

Regarding Claims 10-17, Bader et al. disclose the instantly claimed components (col.3, lines 6-65).

Regarding Claim 18, Bader et al. disclose the instantly claimed limitation (col.5, lines 31-33).

Regarding Claim 20, Bader et al. disclose the instantly claimed limitation (Examples).

Regarding Claims 24 and 25, Bader et al. disclose wherein the silicone additive is present in the instantly claimed ranges (col.4, lines 4-27).

Regarding Claim 28, Bader et al. disclose wherein an exterior side of the first layer is vacuum metallized (col.23-27).



Claims 5-9, 29, 30, 60, and 61 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bothe et al. (4,734,317). Bothe et al. as applied above, are as set forth and incorporated herein. Regarding Claims 5, 6, 29, 30, 60, and 61, it appears that Bothe et al. do not specifically disclose a coefficient of friction and seal strength as instantly claimed. However, Bothe et al. appear to inherently disclose these values because the materials (polymers and silicone additive) of Bothe et al. are the same as Applicant's (as set forth above). If not inherently disclosed by Bothe et al., then it would have been obvious to one of ordinary skill in the art at the time the invention was made to have achieved at least a similar coefficient of friction and seal strength as that as instantly claimed because the materials of Bothe et al. are at least similar to Applicant's. Similar processes can reasonably be expected to yield products which inherently have the same properties. *In re Spada* 15 USPQ 2d 1655 (CAFC 1990); *In re DeBlauwe* 222 USPQ 191; *In re Wiegand* 86 USPQ 155 (CCPA 195).

Regarding Claims 7-9, Bothe et al. disclose wherein the first skin layer further comprises an anti-blocking agent of silica (col.5, lines 17-23). Bothe et al. do not appear to disclose wherein at least a major proportion of the silica is in the form of spherical shaped particles. However, as Applicant has shown no criticality as to "a major proportion," it is the Examiner's position that the silica of Bothe et al. would have inherently contained at least some spherical particles.



Claims 7-9, and 29-30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shah et al. (6,291,063 B1). Shah et al. as applied above, are as set forth and incorporated herein. Regarding Claims 7-9, Shah et al. disclose wherein the first skin layer further comprises an antiblocking agent of silica (col.5, lines 17-23). Shah et al. do not appear to disclose wherein at least a major proportion of the silica is in the form of spherical shaped particles. However, as Applicant has shown no criticality as to "a major proportion," it is the Examiner's position that the silica of Shah et al. would have inherently contained at least some spherical particles.

Regarding Claims 29, 30, 60 and 61, it appears that Shah et al. do not specifically disclose a coefficient of friction and seal strength as instantly claimed. However, Shah et al. appear to inherently disclose these values because the materials (polymers and silicone additive) of Shah et al. are the same as Applicant's (as set forth above). If not inherently disclosed by Shah et al., then it would have been obvious to one of ordinary skill in the art at the time the invention was made to have achieved at least a similar coefficient of friction and seal strength as that as instantly claimed because the materials of Shah et al. are at least similar to Applicant's. Similar processes can reasonably be expected to yield products which inherently have the same properties. *In re Spada* 15 USPQ 2d 1655 (CAFC 1990); *In re DeBlauwe* 222 USPQ 191; *In re Wiegand* 86 USPQ 155 (CCPA 195).

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Claims 29, 30, 60, and 61 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bader et al. (5,972,496). Bader et al. as applied above, are as set forth and incorporated herein. Regarding Claims 29 and 30, it appears that Bader et al. do not specifically disclose a seal strength as instantly claimed. However, Bader et al. appear to inherently disclose this value because the materials (polymers and silicone additive) of Bader et al. are the same as Applicant's (as set forth above). If not inherently disclosed by Bader et al., then it would have been obvious to one of ordinary skill in the art at the time the invention was made to have achieved at least a similar seal strength as that as instantly claimed because the materials of Bader et al. are at least similar to Applicant's. Similar processes can reasonably be expected to yield products which inherently have the same properties. *In re Spada* 15 USPQ 2d 1655 (CAFC 1990); *In re DeBlauwe* 222 USPQ 191; *In re Wiegand* 86 USPQ 155 (CCPA 195).

Claims 31-33, and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Peiffer et al. (6,086,982) as set forth in the previous office action. As Claims 31 and 52 read, there is no specific order to the layers, and the claim as written reads on a layer on one side of the core and another layer on the other side of the core. The layers of Peiffer et al., as cited, can read on this configuration. Peiffer et al. disclose that polydimethylsiloxane can be added to a top ply (col.6, lines 60-67), and then be surface treated (col.7, lines 41-42). Regarding 1,000,000 centistokes in viscosity, Peiffer et al. disclose from 5,000 to 1,000,000 m²/s (centistokes=m²/s), and Applicant claims greater

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than about 1,000,000 centistokes, which amount that is about 1,000,000 being anticipated.

New Claim Rejections - 35 USC § 103

Claims 11, 19, 21, 22, 26, 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bothe et al. (4,734,317). Bothe et al., as applied above, are as set forth and incorporated herein. Regarding Claim 11, Bothe et al. disclose wherein the film comprises ethylene-propylene-butene-1 terpolymer and ethylene-propylene copolymer in a mixture (col.4, lines 6-30). Bothe et al. do not appear to disclose an amount of each in the mixture. However, because the range as claimed is so broad, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the components in the instantly claimed range through routine experimentation and optimization. It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller, 105 USPQ 233, 235.*

Regarding Claim 19, Bothe et al. do not appear to specifically disclose a total thickness of the film in the instantly claimed range. However, Bothe et al. do disclose a thickness of the base layer and other layers in the range of Applicant's, and that the thickness of the film can vary according to the intended use (col.6, lines 51-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the thickness of the film to a variety of thicknesses.

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including that as instantly claimed, because Bothe et al. teach that the thickness of the film can be varied depending on the intended use.

Regarding Claims 21, 22, 26, 52, and 53, Bothe et al. do not appear to disclose the instantly claimed viscosity of silicone additive. However, as Applicant has shown no criticality as to the instantly claimed viscosities (but rather to the viscosity similar to Bothe et al.), and Bothe et al. having determined that the viscosity is a result-effective variable, then it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the silicone additive with a variety of viscosities, including that as instantly claimed, through routine experimentation and optimization. A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Boesch, 205 USPQ 215.* It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller, 105 USPQ 233, 235.*

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shah et al. (6,291,063 B1). Shah et al., as applied above, are as set forth and incorporated herein. Regarding Claim 11, Shah et al. disclose wherein the film comprises at least one of ethylene-propylene-butene-1 terpolymer and ethylene-propylene copolymer (col.11, lines 9-20). Shah et al. do not appear to disclose an amount of each in the

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mixture. However, because the range as claimed is so broad, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the components in the instantly claimed range through routine experimentation and optimization. It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller, 105 USPQ 233, 235.*

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bader et al. (5,972,496) in view of Touhsaent (6,013,353). Bader et al., as applied above, are as set forth and incorporated herein. Regarding Claim 27, Bader et al. do not appear to disclose applying a coating to a skin layer from the group as instantly claimed.

Touhsaent discloses applying acrylics to a polymer skin layer, and that this is well known in the art (col.5, line 53-col.6, line 33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the layer of acrylics as taught by Touhsaent to the polymer skin layer of Bader et al. because Touhsaent teaches that applying a layer of acrylics to a polymer skin layer in a multilayer film is well-known in the art and it produces increased adherence of following polymeric layers resulting in a higher quality product.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. (6,086,982). Peiffer et al., as set forth above, are as set forth and incorporated herein. Peiffer et al. do not appear to disclose the instantly claimed viscosity of silicone

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additive. However, as Applicant has shown no criticality as to the instantly claimed viscosities (but rather to the viscosity similar to Peiffer et al.), and Peiffer et al. having determined that the viscosity is a result-effective variable, then it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the silicone additive with a variety of viscosities, including that as instantly claimed, through routine experimentation and optimization. A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Boesch, 205 USPQ 215.* It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller, 105 USPQ 233, 235.*

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (703) 305-2778. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Dawson can be reached on 308-2340. The fax phone numbers

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Robert a Dawson

for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Christopher Keehan Cuk

August 28, 2002